DOCUMENT RESUME

ED 275 818 CE 045 347

TITLE Assessment, Quality and Competence: Staff Training Issues for NCVQ. An FEU View.
INSTITUTION Further Education Unit, London (England).
REPORT NO ISBN-0-948621-40-0
PUB DATE Sep 86
NOTE 49p.
PUB TYPE Viewpoints (120) -- Guides - Non-Classroom Use (055)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Competence; Foreign Countries; *Postsecondary Education; *Staff Development; Standards; Teacher Education; *Teacher Qualifications; Vocational Education; *Vocational Education Teachers
IDENTIFIERS *Great Britain

ABSTRACT

This document discusses some of the problems and solutions that should be addressed if further education teachers and their training counterparts are to cope with the requirements of Great Britain's new National Council for Vocational Qualifications (NCVQ). It is both a handbook to guide practitioners through some of the assessment implications of Review of Vocational Qualifications (RVQ) and an issues paper for those who will be involved in negotiating the rules and principles to be adopted by the NCVQ. Seven sections describe the new structure of vocational qualifications, rehearse the RVQ objectives, address the quality of the standards, and discuss the nature and assessment of competence. Three appendixes reproduce the summary, recommendations, and glossary of the final RVQ report and provide an overview of how the major further education examining bodies and others maintain quality and comparability of standards. (YLB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED275818

FURTHER EDUCATION UNIT

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it.

Minor changes have been made to improve reproduction quality.

Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

J Mansell

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)"

Assessment, Quality and Competence

BEST COPY AVAILABLE

An FEU View

Assessment, Quality and Competence: Staff Training Issues for NCVQ

An FEU View

September 1986

ISBN 0 948621 40 0
© Further Education Unit (FEU) 1986

Reproduction in whole or in part of the contents of this publication is authorised for all non-commercial educational purposes, provided the source is acknowledged.
All rights reserved with regard to commercial reproduction of the contents.

Printed by Lithosphere Printing Co-operative Ltd.,
205 Pentonville Rd, London N1. ☎ 01-833 2526

FEU

FURTHER EDUCATION UNIT

Elizabeth House York Road London SE1 7PH Telephone 01-934 9000

Chairman: J.D. Owen CBE

Chief Officer: Jack Mansell MEd(Cantab) FEI MMechE

Chief Education Officers
Principals of FHE Establishments,
Secretaries of Regional and FE
Examining Bodies
Press and other interested
Institutions/Individuals

Dear Sir/Madam

ASSESSMENT, QUALITY AND COMPETENCE

Enclosed is a document of the above title which is an FEU view on the staff training required for NCVQ. One of the less obvious recommendations of the Review of Vocational Qualifications was that 'there will have to be a substantial programme of staff training in both the further education and training systems...' if NVQ is to be successfully implemented (para 6.22).

The FEU, in its response to the RVQ Report,* noted this and commented that notwithstanding that recommendation the technical problems of assessing competence remain formidable. It indeed noted that there was a danger of creating a credibility gap between the rhetoric and actual improvement of assessment, quality and competence. This applies as much to YTS as to other qualifications.

This document discusses some of the problems, and solutions, that should be addressed if FE teachers and their training counterparts are to cope with the requirements of the new National Council for Vocational Qualifications, the setting up of which has now been accepted by the Government.**

The first part comprises seven sections which describe the new structure, rehearse the RVQ objectives and discuss the nature and assessment of competence. The second part of the document comprises appendices which reproduce the summary, recommendations and glossary of the final RVQ report. Another useful appendix gives an overview of how the major FE examining bodies and others maintain quality and comparability of standards.

In one sense, therefore, this document is a handbook to guide practitioners through some of the assessment implications of RVQ. In another sense it is an issues paper for those who will be involved in negotiating the rules and principles to be adopted by the new National Council. Our working definitions of competence and performance, for example, undoubtedly require more discussion and refinement before we commence testing (and therefore failing) people. Is workplace assessment more or less advanced in its techniques than college assessment? Where is the quality of learning located? Who mediates this new framework to the clients, parents and the community at large?

The answers to these questions may help to close the credibility gap, but getting at them comprises a formidable staff training programme. This document begins to answer some of the questions, and we hope it is accepted as a modest but timely FEU contribution to what is going to be a major venture over the next few years.

Yours faithfully

Jack Mansell

JACK MANSELL
CHIEF OFFICER

* *Response to the Review of Vocational Qualifications Final Report*. FEU, July 1986

** *Working Together – Education and Training*. Cmnd 8923. HMSO, July 1986.

CONTENTS

		Page
I	INTRODUCTION	1
II	STRUCTURE	3
III	OBJECTIVES	6
IV	QUALITY	7
V	COMPETENCE	10
VI	ASSESSING COMPETENCE	12
VII	SUMMARY AND CONCLUSIONS	18
	REFERENCES	19
APPENDIX 1	Summary and Recommendations of the Review of Vocational Qualifications.	20
APPENDIX 2	Some approaches to assessment.	26
APPENDIX 3	Glossary of Education and Training Terms (used in RVQ report).	40

I INTRODUCTION

1. The FEU is becoming increasingly concerned that the pressures on the vocational education system to change its practices with respect to assessment are not being matched by a corresponding increase in the general level of FE teachers' expertise. It is probably a problem that also confronts many in the schools system.

2. Work by the DES, MSC and others, including the FEU, seeks to persuade the FE system to become more flexible with respect to its testing provision, more precise with respect to its learning outcomes, more predictive with respect to transfer and more comprehensive with respect to recording the achievements of its learners.

3. Additionally, the April 1986 report of the Review of Vocational Qualifications[1] contains recommendations (see Appendix 1) which have been accepted by the Government[2] and will, over the next five years or so, require FE, and schools, to relate to a new structure of vocational qualifications and a new central organisation. Other recommendations are related to new ways of setting standards, increased progression, credit recognition, accumulation and transfer, cost-effectiveness and a substantial increase in skills testing facilities.

4. Experience with BEC and TEC (now BTEC), and more recently GCSE, YTS and CPVE, indicates that whilst the need for staff development is often acknowledged in general terms, the specific problems relating to assessment are rarely defined. For FHE, and probably the school sector before too long, the report of the Review of Vocational Qualifications brings to a head many of these problems. We note that paragraph 6.22 of the RVQ report suggests that a carefully planned and adequately resourced programme of staff training in both the further education and training systems will be required to implement the RVQ proposals. This short document examines some of the technical issues related to the contemporary pressures with respect to assessing competence. It seeks to demonstrate that unless

more training and resources are injected into this area, there is a danger of creating a credibility gap between the rhetoric and the actual improvement of assessment, quality and competence.

II STRUCTURE

5. The present structure of vocational qualifications comprises three parts: examining and validating bodies, professional bodies and industry-related training and testing organisations. Appendix 2 of this document describes some of the bodies associated with each part and outlines the approaches they adopt towards assessment and certification. The RVQ report described the existing system as disparate, complex and large, having no readily available statistics on total numbers holding vocational qualifications in categories or on the costs of the system. A selective survey by the FEU[3] certainly confirms the latter point.

6. To this vocational structure must be added 'school-based' examinations: CSE and 'O' level, soon to become GCSE; 'A' levels whose grading system is to change in 1987; and 'A/S' levels, a new series of subjects aimed at broadening the sixth-form curriculum. A recommendation of RVQ will be seen to be that discussions should take place between the new National Council for Vocational Qualifications (NCVQ) and the Secondary Examinations Council (SEC) at an early date to establish linkages between the new vocational qualifications framework, and new GCSE and 'A' levels.

7. The new framework of vocational qualifications with its five levels will have to look something like that shown in Fig.1. Many of the existing qualifications are time-related and do not easily relate to the RVQ standards described; and so either the qualifications or the standards, or both, may have to be adjusted. To the existing qualifications will eventually be added others. For example, the linkages with GCSE and 'A' levels will probably increase the complexity of the framework, as may the linkages that will be necessary with the qualifications offered by the professional bodies - another item for discussion with the new NCVQ. Further contributions to complexity will undoubtedly come from industry-related organisations. To achieve compatibility in practice as well as in theory may well require additional resources.

Fig.1

A National Framework

LEVEL	The possible location of existing qualifications?	Standard of Occupational Competence
I	Pre-vocational for example CPVE? YTS?	Occupational competence in performing a range of tasks under supervision.
II	For example Part I Schemes? YTS2?	Occupational competence in performing a wider, more demanding range of tasks with limited supervision.
III	For example Part II Schemes? National Certificates?	Occupational competence required for satisfactory, responsible performance in a defined occupation or range of jobs.
IV	For example Part III Schemes? HNC Schemes?	Competence to design and specify defined tasks, products or processes and to accept responsibility for the work of others.
V	For example HNC / HND? Part III+ Schemes? Professional Qualifications?	Competence at professional level with mastery of a range of relevant knowledge, and ability to apply it at a higher level than IV

Note: It is assumed that at every level there will be some arrangement to allow alternative access (e.g. due to experiential learning), and some form of quality control.

8. A problem that emerges, therefore, is that few teachers, and fewer parents and employers, fully understand the present complex structure of qualifications. The new framework will, hopefully, be simpler but it will of necessity be complex if the proper links between the three parts, the SEC-based qualifications, and higher education are to be generated. Promotion to the public will undoubtedly be required, but in the long term it is local mediation by teachers and trainers that will count, and this requires training.

III OBJECTIVES

9. Appendix 1 shows that the RVQ report requires any new system of vocational qualifications to be clear, coherent and comprehensive, based on the assessment of competence directly relevant to the needs of employment and the individual. More specific objectives are that the system should be comprehensible, relevant, credible, accessible and cost-effective.

10. These objectives were rehearsed in the 1985 interim report of RVQ; and whilst they were generally accepted, there was a general recognition that they were more easily stated than implemented[4]. Many of the objectives put conflicting demands on the system. For example, the workforce in the UK is diverse but, relative to many of our competitors, it is underqualified. If the RVQ exercise is to improve this situation, then a proper emphasis will have to be given to wider accessibility and relevance. But a diverse occupational structure inevitably demands a diverse range of vocational qualifications; this does not relate easily to comprehensibility, or indeed to some aspects of credibility.

IV QUALITY

11. Appendix 2 of this document includes a brief description of how the three major FE examining bodies attempt to maintain quality and comparability of standards. All three bodies are increasing their commitment to criterion-based assessment, and where internal assessment is a significant element, some form of external moderation is employed. Much the same applies to the monitoring of standards in HE and in schools. Indeed in the SEC examination system the monitoring is more complex because of the need to ensure comparability across examining boards offering similar qualifications.

12. Less information is available as to how industry and the professional bodies monitor standards and quality, but Appendix 2 gives some examples. If the new vocational structure is to combine its three disparate parts (see paragraph 5 above) into a more cohesive structure, then the ways in which standards and quality are maintained will require to be compatible and comparable. This will particularly apply if increases are to occur in the ways in which a composite qualification will be made up; for example, through the accreditation of learning gained outside formal education and training, through the use of skills tests and/or through modules.

13. There are other aspects of quality that require discussion. It would be naive to assume that any system of vocational qualifications related to statements of competence will automatically produce a better qualified workforce. The statements of competence may not be well defined or soundly based. They may be inaccurate or even dangerous (e.g. in hazardous working environments). They may be incomplete (e.g. their fulfilment may not produce the type of 'well-rounded' person that is generally required). They may be structurally inadequate (e.g. they do not conform to the basic criteria of levels or vocational specificity that may be laid down by RVQ).

14. Whatever the defect, if unchecked it would adversely affect the quality of the qualification that was on offer. At

best, assessment can only sample total achievement, the quality of that total achievement is as much related to the quality and content of learning as it is to the apparent demonstration of performance. A system of vocational qualifications based on restricted definitions of competence may give spurious and short-sighted solutions to the problem of enhancing quality, i.e. the qualifications would lack credibility.

15. The Government in its White Paper[2] has set the new National Council nine specific tasks, one of which is to secure arrangements for quality assurance. The RVQ report (paragraphs 5.14 - 5.17) described the role that the new National Council will have to play in quality assurance. Three main responsibilities were identified. First, in the process of accrediting certifying bodies, the Council will require to be satisfied with respect to their arrangements for quality control. Secondly, there will be a need to ensure that the certifying bodies adopt and implement certain minimum standards of good and dependable practice of assessment. Thirdly, the National Council will be concerned with evaluating the value and influence of, and recognition given to, qualifications.

16. The process of learning is not therefore defined by RVQ as a main element of quality control. Indeed the RVQ report claims (paragraph 3.5) that it was not concerned with the 'provision and delivery of vocational education and training' although it recognises that the FE system will have a role to play.

17. All this raises the issue as to how important the quality of training/education is deemed to be in the generation of quality qualifications. It is tempting to be attracted to the oft-quoted analogue of the driving test, whereby tests can be obtained on appointment to suit the client, with no questions asked as to the nature and quality of the learning that has taken place. The accident rate on our highways does cast some doubt on the validity of that test, but the flexibility of the system remains attractive. We say more about the nature of competence and its testing

below, but there remains much to be done with respect to defining and evaluating the sampling validity of tests before we can ignore the contribution to quality made by the design and delivery of a curriculum or training programme. This is an issue not restricted to FE colleges.

V COMPETENCE

18. If the concept of quality requires greater clarification, then so does that of competence. The RVQ definition of competence (see Appendix 3) as the ability to perform a particular activity to a prescribed standard only helps in part to clarify this concept. The terms 'prescribed standard' and 'activity' obviously require further definition and, as paragraph 13 explains, such definitions could be defective, or at least restrictive. The FEU has elsewhere[5] developed a broader definition of competence which involves skills, knowledge, attitudes and experience leading to successful performance in life roles. This implies maturity and responsibility in a variety of roles, and it includes experience as an essential component. Maturity, responsibility and experience call for broad-based learning, within a framework of equal opportunities.

19. Whatever the definition, competence is unlikely to be adequately defined unless it is related to at least knowledge, understanding, skills and performance. These are the terms used in the RVQ report. The FEU definition includes attitudes, experience and roles. An analysis by other researchers[6] uses a similar vocabulary.

20. These disparities, however, only serve to underline the fact that performance is capable of subsuming all definitions of competence and the definition of performance can be quite arbitrary and will rarely be static. The standards that help to define performance may be the result of detailed discussion but these too are more often than not arbitrary and relate to roles (and demands) as they are perceived at a particular time. Few measurements are absolute. Descriptors of performance, standards, competence, etc. invariably involve value judgements and are therefore subject to negotiation and compromise. They are also vulnerable to the ravages of time, and a sensitive balance has always to be drawn between the demands for stability and currency. It is the status and credibility of those who generate the standards and descriptors that matters; and, for the NCVQ at least, this is an issue yet to be settled.

21. The RVQ descriptions of standards related to the levels of the proposed National Vocational Qualification (NVQ) shown in Fig.1 illustrate the arbitrary nature of competence and performance. As long as it is acknowledged that the assessment of competence can be no more precise than the definition of competence, then the RVQ descriptions provide as good a starting-point as any. It is when criticism is made of the apparent inability of the assessment system to design and deliver more precise and valid indications of competence than have the standard setters that a credibility gap occurs.

VI. ASSESSING COMPETENCE

22. To illustrate the diffi- lties, we discuss briefly below four aspects of competence testing where the expectations exceed the practice. These are the duration of assessment, workplace assessment, testing for transfer, and recording competence.

Duration of assessment

23. It has been explained above that the assessment of performance as a demonstration of competence will usually require the assessment of knowledge, understanding, skills, tasks and role. These are hierarchic but they overlap with each other. The assessment of knowledge is a highly developed assessment technology and, with the aid of methods such as objective testing, it can be carried out quite quickly.

24. The assessment of understanding is also well developed; it is usually based on more complex and deeper questioning and often requires the synthesis of a substantial written and/or oral response. This type of assessment takes time, ranging from a few minutes to many hours, and to be valid it is not a process to be rushed, or concentrated into a single event. The 'big bang' written examination as the sole test of understanding is now a rarity.

25. Much the same can be said about skills. These can be simple or complex, the latter often involving combinations of sub-skills. The FEU[7] and others have discussed the assessment of skills elsewhere, and a substantial base of theory and practice exists, not all of it well assimilated by the formal education/training system. Suffice it to say at this stage that the growing appreciation of the distinction between product and process skills and their assessment indicates that skills testing will range over a spectrum of time and complexity. And by one model at least, what occupational skills have by definition is the ability to be tested.

26. Tasks can be regarded as a necessary combination of skills. A typical secretarial task is to translate an abbreviated communication into an accurate and presentable typed letter, and organise its efficient despatch. A typical cook's task would comprise a combination of skills related to the efficient purchase, preparation and processing of a choice of edible ingredients - resulting in a cooked meal. A typical managerial task could be the efficient chairing of a working party. It will be seen from these examples that the assessment of tasks will generally take longer than the testing of skills, and will invariably require observation and judgement from the assessor.

27. Roles comprise the day-to-day performance of one or more tasks. Occupational roles sometimes require lengthy 'job descriptions' to describe them and they can involve all the components we discussed in the above paragraphs. An occupational role related, say, to a Level III qualification of the RVQ structure (see Fig.1) will undoubtedly involve the maintenance of a well-understood body of knowledge and the regular demonstration of defined skills, on a day-to-day basis. All within a particular framework of constraints and expectations - such as being punctual, supporting attempts to increase productivity, working harmoniously with colleagues and for clients, assuming new responsibilities, etc. Roles obviously involve attitudes, and in discussing role performance the Prospect Centre report[6] suggests that assessments of competence 'cannot be made until sufficient time has passed for a person to build up a track record of behaviour'. This obviously requires observation (and/or appraisal) over several months in a work situation. Formal testing is surely inapplicable, and perhaps this is where the driving test is inadequate, and skills testing is a spurious solution.

28. In the light of the above it appears unrealistic to assume that qualifications (vocational or otherwise) based solely on formal tests can guarantee role competence (occupational or otherwise). This is not a new discovery, and those in education/training associated with assessment rarely make

this assumption. With a greater recognition of workplace and other experiential learning, vocational qualifications may get nearer to occupational competence, but the technical problems of definition and integration remain formidable. Formative assessment, better liaison between employers and colleges, outreach, profiles and a realistic attitude towards the sampling power of any assessment are the components of a possible solution. They all imply a need for training.

Workplace assessment

29. The desirability of including workplace assessments in vocational qualifications is not new. Sandwich courses have been around for many years and are particularly associated with advanced/higher education/training. They retain popular support although their cost-effectiveness has been questioned[8] and, with a few exceptions, they have not contributed significantly to the technology of assessing occupational competences and roles. Employers do claim that understanding, process skills and relationships are enriched by sandwich work placements; these are, however, general perceptions not based on formal assessments.

30. Similarly it is possible to include workplace units and their assessment in BTEC and other schemes. More recently YTS with its work-based training philosophy has increased the expectations of workplace assessments, but a study of the literature issued so far[9] shows little progress beyond that of better definitions of job competence and a greater awareness of the need for a more systematic approach to assessment. Indeed, an examination of Appendix 2 of this document tends to suggest that in spite of the rhetoric promoting on-job, criterion-based competence testing, it remains as yet an unproven technique. By far the dominant mode of testing, whether in-firm, college or other testing centre, is <u>off-job</u> testing. The evidence further shows that in spite of the existence of a sophisticated technology of assessment and examining, progress towards work-based, criterion-based competence testing is patchy, and perhaps the 'weakest' areas of

assessment in technical terms is when instructors (and teachers?) are in control of their own standards[10,11]. 'Standard tasks' may be a solution, but how well do they reflect occupational roles?

31. We have to assume, therefore, that there is much to be done before on-job assessment becomes a major part of a coherent system of vocational qualifications, to the objectives laid down by the RVQ report[1]. Apart from the technical issues of reliability and validity, to which much of the above discussion relates, there remain problems of integration[12] with off-job assessments and monitoring of standards.

Testing for transfer

32. The ability to transfer skills learned in one context to another with a minimum of further education or training has proved difficult to analyse, but it remains a popular goal in both education and training contexts. 'Training the mind', through a subject discipline, is still a phrase familiar to many. The ability to transfer skills is in fact a primary aim of YTS and it is referred to in each of the CPVE core headings, but so far there has been no significant evidence that these intentions have been realised.

33. The FEU[7], and others[13], have pointed out that transferability can be promoted by including it in the basic design of the programme; and YTS and CPVE have at least made a start in this direction. Skills which are common to many tasks and roles are obviously transferable and are sometimes called generic skills. There appears to be general agreement that the extent to which a skill is transferable depends upon such things as the nature of the skill, the context in which the skill has been taught and learned, and the characteristics of the learner.

34. The teaching and learning strategies associated with transfer are concerned with raising the awareness of the learner: with respect to his/her own learning styles and potential for transfer. The act of transfer also requires

skills, sometimes called skills of transfer (or transfer skills). These are usually related to the individual being able to identify his/her needs in a new situation, adjust or reorganise previous learning, and assess his/her own performance. All this requires active rather than passive learning, supported by formative assessment.

35. The assessment of transfer, however, requires the creation of new tasks using familiar skills in a different environment. So far, no doubt because of the many variables involved, as discussed above, a convenient and practical methodology for testing and scoring transfer has yet to be adopted. This, and the additional resources and time required to train and test for transfer, probably account for the lack of general progress in this area.

Recording competence

36. The RVQ recommendations make at least two specific demands with respect to the recording of achievement. The first (6.16) is that all levels of the new National Vocational Qualification :

> 'should provide for cumulative credit, with, at each level, the definition of a minimum group of competence required for the issue of an award.'

The second (7.17) recommends that :

> 'attention should be given to ways of making qualifications more informative, especially in indicating the competence of an individual'.

37. We have discussed above the many dimensions of competence, and any record of competence will therefore require the recording of a variety of assessments, ranging from short objective tests to professional observations. The resultant record of achievement, whether it is a profile[14], some form of portfolio or another device will, of necessity, be a more complex document than many of the examination and test certificates now issued.

38. Add the provision for cumulative credit and the increasing probability of including records of work-based learning, and the existing problems of producing profiles/records of achievement are compounded. The evidence so far associated with the integration of multi-agency testing records[12] indicates that there is much to be done. Computer-assisted profiling[15], and similar techniques, point a way forward, but these require a considerable investment in the vocabulary and definition of competence and performance - an investment that is apparently so far lacking as much in industry as elsewhere.

VII. SUMMARY AND CONCLUSIONS

39. In this document we have attempted to identify some of the more persistent issues associated with the nature and assessment of competence. Setting up new structures and mechanisms will not automatically solve the difficult problems that always arise when one person attempts to judge the performance of another. These problems are not unique to the assessment of occupational competence, nor are they new.

40. We point out that although the new RVQ structure and framework should have a simplicity not existing at the moment, they must inevitably contain a complex series of qualifications if these are to relate effectively to a changing and expanding clientele. This will require continual mediation to the public by teachers and trainers, an often underestimated task.

41. We point out that some of the objectives set by RVQ, although totally desirable, are in conflict with one another. This will require balance and judgement, and will no doubt provide a constant source of criticism.

42. We also point out that the location of quality is not well recognised. Quality is embedded in all the processes of curriculum development: analysis of needs, programme design, delivery - as well as testing. To separate the delivery of training and education from assessment could reduce the quality of learning.

43. We indicate that the defining of competence is not an exact or static science, and standard setting is almost by definition an arbitrary - not to say political - process.

44. We illustrate, by analysing some of the issues associated with assessing competence, that it is an incomplete technology; there are no easy answers; and the inclusion of experiential learning will make the situation more complex.

45. This document is intended to provide some guidance on the staff training, research and development that will be required to make RVQ a success.

REFERENCES

1. Review of Vocational Qualifications (Final report) MSC/DES, April 1986.

2. Working Together - Education and Training Cmnd 9823, HMSO, July 1986.

3. The Cost of Assessing FEU, 1986.

4. Response to RVQ Interim Report FEU, October 1985.

5. Towards a Competence-based System FEU, August 1984.

6. The Contribution of Competence and Capability to a Vocational Qualification (a report to MSC) The Prospect Centre, January 1986.

7. Basic Skills FEU, 1982.

8. An Assessment of the Costs and Benefits of Sandwich Education DES, 1985.

9. For example: Mathews, D. and Mansfield, R. Job Competence and Occupational Standards FESC/ESF Core Skills Project, 1985.

10. Practical Mathematics at Work: Learning through YTS MSC, 1984.

11. Reliability and Comparability Study for MSC (an interim report by University of London Institute of Education) 1985.

12. Assessing Work-based Learning - a summary of the RSA/MSC Core Certification Project. MSC/RSA, 1986.

13. Training for Skill Ownership Institute of Manpower Studies, 1983.

14. Profiles FEU/Longman 1982, and Profiles in Action FEU/Longman, 1984.

15. Computer Aided Profiling FEU/Longman, 1983.

FROM: Review of Vocational Qualifications in England and Wales HMSO, 1986

Summary and Recommendations

1.1 If the nation is to keep pace with technological and economic change and to succeed against strong international competition it is vital that the workforce should be competent and adaptable. Present vocational qualifications, on which both employers and individuals rely for evidence of ability, have many strengths, but there are marked weaknesses overall.

1.2 That analysis led the Government to establish this review of vocational qualifications in England and Wales. We were asked to recommend an improved system and to design a timetabled programme to implement it.

1.3 This report first identifies the strengths and weaknesses in present arrangements for certifying vocational achievement, then specifies objectives for an improved system, and finally makes recommendations on how the objectives can be met – by establishing a new national body responsible for implementing change, by designing a national framework for vocational qualifications, and by establishing arrangements for specifying standards of competence required in employment.

1.4 Our remit did not extend to Scotland or Northern Ireland, although we make some observations on implications for those countries. We have not considered examinations that are the responsibility of the Secondary Examinations Council (SEC), nor degrees to be within our remit, but recommendations are made on progression into higher education and higher level professional qualifications, and on the need to establish relationships between SEC qualifications and those within our remit.

1.5 Five concerns have been stressed again and again during the review, both in our own discussions and in comments and submissions made by others:

- the nation needs a greater number of better-qualified people;
- action must be taken to reduce the confusion of present provision;
- the unhelpful divide between so-called academic and so-called vocational qualifications should be bridged;
- vocational qualifications should relate more directly and clearly to competence required in work;
- we should try to build on what is good in present practice.

1.6 We have focused our analysis on the three main parts of the present complex arrangements:

- the examining and validating bodies, which issue about 1.5m awards annually;
- the 250 or so professional bodies which examine;
- the 120 industry training orgainsations, of which 8 are Industry Training Boards with statutory responsibilities.

Present Arrangements

1.7 There are important strengths in present arrangements which should be preserved and built on. They include:

- credibility with employers, with providers of education and training and with those who register with them;
- diversity of provision and a responsiveness to the market;
- generally dependable assessment procedures and testing arrangements;
- a well developed partnership between the further education system and many of the bodies awarding qualifications.

1.8 But there are also weaknesses to be rectified. They include:

- no clear, readily understandable pattern of provision;
- considerable overlap and duplication;
- gaps in provision;
- many barriers to access to qualifications and inadequate arrangements for progression and transfer of credit;
- assessment methods which are biased towards the testing of knowledge rather than skill or competence;
- insufficient recognition of learning gained outside formal education and training;
- limited take-up of vocational qualifications.

1.9 There is no effective national system for vocational qualifications.

Objectives for a Vocational Qualifications' System

1.10 We believe a vocational qualification should be defined as:

a statement of competence clearly relevant to work and intended to facilitate entry into, or progression in, employment, further education and training, issued by a recognised body to an individual. This statement of competence should incorporate the assessment of:

- **skills to specified standards;**
- **relevant knowledge and understanding;**
- **the ability to use skills and to apply knowledge and understanding to the performance of relevant tasks (4.3).**

1.11 Objectives for an improved system of vocational qualifications were identified in our Interim Report. They received widespread support and were endorsed by the Government and by the Manpower Services Commission. We recommend that:

(1) the general objective should be to develop a clear, coherent and comprehensive system of vocational qualifications, based on the assessment of competence directly relevant to the needs of employment and the individual (4.5);

(2) the more specific objectives should be to develop a system which is comprehensible, relevant, credible, accessible, and cost-effective (4.6).

1.12 Present arrangements fall far short of these objectives. We conclude that action is necessary to establish a new national body to implement change, to develop a national framework of vocational qualifications and to ensure standards of competence are set.

A National Council for Vocational Qualifications

1.13 Given the complexity of current arrangements we are convinced that a sharp national focus is required as an effective engine for change. This view received the overwhelming support of those consulted following the Interim Report. We recommend that:

(3) the Government should establish a National Council for Vocational Qualifications (NCVQ) (5.2);

(4) the NCVQ should report to one Secretary of State so that there is a clear focus for action at Government level (5.2);

(5) the NCVQ should be established on a non-statutory basis, but if progress towards the desired objectives is unsatisfactory the Government should enact appropriate legislation (5.3);

(6) the overall remit of the NCVQ should be to implement, or secure action to implement, a system of vocational qualifications that will achieve the objectives of comprehensibility, relevance, credibility, accessibility and cost-effectiveness (5.4).

1.14 The NCVQ should be a body which develops policy for the vocational qualifications system as a whole, negotiates to achieve the stated objectives for the system and accredits those bodies that are approved to offer awards within a new national framework. We are not proposing that it should be an examining or a validating body.

1.15 We advocate a National Council with a high calibre membership commanding national respect. We recommend that:

(7) members of the NCVQ should be appointed by the Secretary of State on the basis of their knowledge of the needs of employers and employees and of vocational education and training practice (5.6);

(8) in order to maintain a position of independence, the Chairman of the NCVQ should have no direct involvement in the certification of vocational education and training (5.7);

(9) the Chairman and other members of the NCVQ should be appointed initially for a 3 year period (5.7);

(10) in order to provide for a range of interests yet make for speedy decision-making, the NCVQ should consist of a membership of between 10 and 15 (5.7).

1.16 Although the NCVQ will not have statutory powers, it could, with the support of those with powers, such as LEAs and the MSC, exert leverage upon the system in order to achieve the desired objectives.

1.17 The NCVQ will have important responsibilities for quality assurance, met in the main through its accreditation function, although the certifying bodies will retain responsibility for quality control of their own qualifications. It will also need to ensure that assessments effectively describe competence and provide for the assessment of work-based learning and experience. To achieve this, we recommend that:

(11) the NCVQ should decide how best an authoritative, central source of information on theory and practice of assessment

methods and a development resource to improve the quality of vocational qualifications should be established (5.16).

1.18 We consider that the NCVQ should be properly resourced to enable it to undertake its important job effectively. A total of 65–70 staff might be required. Funds will also be needed for development work on the new national framework, giving an estimated total annual cost of £3.0m. Further funds will be required for a major promotional campaign. To meet these costs we recommend that:

(12) NCVQ should receive pump-priming government funding for up to five years (5.23);

(13) In due course, the NCVQ should be funded through a mixture of government grant and a levy on certifying bodies for the use of the NCVQ seal of approval on a certificate (5.25).

1.19 There are urgent tasks to be undertaken. We recommend that:

(14) the NCVQ should be established by autumn 1986 (5.27).

A National Framework for Vocational Qualifications

1.20 We conclude that the most effective way of providing coherence, clearly understood standards and routes of progression is to bring qualifications within a readily understandable national framework. We recommend that:

(15) vocational qualifications should be brought within a new national framework, to be called the National Vocational Qualification (NVQ) (6.1);

(16) the NCVQ should, by a process of accreditation of approved bodies, give its seal of approval to those qualifications which meet the criteria which it lays down (6.1).

1.21 The detailed design of the framework is a task for the NCVQ in consultation with relevant interests, but in order to provide a clear classification and hallmarking system for vocational qualifications we recommend that:

(17) the framework should be designed to embrace levels of awards up to and including the higher levels of professional qualifications (6.7);

(18) the first four levels of the framework should cover the range of achievement up to and including Higher National awards and equivalents, including appropriate examinations of the professional bodies. The levels of award of the NVQ should be based on the following descriptions:

Level	Description of Standard
I	**Occupational competence in performing a range of tasks under supervision.**
II	**Occupational competence in performing a wider, more demanding range of tasks with limited supervision.**
III	**Occupational competence required for satisfactory, responsible performance in a defined occupation or range of jobs.**
IV	**Competence to design and specify defined tasks, products or processes and to accept responsibility for the work of others.**

Level V should reflect competence at professional level with mastery of a range of relevant knowledge and the ability to apply it at a higher level that IV. (6.8)

1.22 We believe that the design and implementation of the first four levels in the framework (including certification of YTS as an integral part of this) should be a priority for the National Council. Work beyond level IV, which might include one or more levels, will take longer and must involve extensive consultations. We look to the National Council to begin these quickly with a wide range of interested professional bodies. The framework will provide for progression into higher education and the higher levels of professional qualifications.

1.23 Account will also need to be taken of GCSE and A levels. It will be an important early task for the National Council to enter into discussions with the Secondary Examinations Council (SEC). We recommend that:

(19) the NCVQ enter discussions with the SEC at an early date to establish linkages between the new framework, the new GCSE and A levels (6.12).

1.24 We consider that the framework will meet occupational needs in all sectors, will provide for cross sector needs and will satisfy the personal development needs of individuals. In order to provide for flexibility and recognition of small blocks of achievement we recommend that:

(20) the conditions for the award of the NVQ, at all levels, should provide for

cumulative credit, with, at each level, the definition of a minimum group of competences required for the issue of an award (6.16).

1.25 We referred in 1.10 to a definition of a vocational qualification and noted that assessment of competence should incorporate three elements – the assessment of skills, of knowledge and understanding, and of the ability to use skills and apply knowledge and understanding. We recommend that:

(21) in the design of the criteria for the National Vocational Qualification, assessment of all three elements is stated as an essential requirement for an award (6.17).

In this way certification of education, training and work experience in an integrated programme can be provided for.

1.26 We recognise the value of modules, particularly in aiding flexibility and relevance, although we have concluded that a single pattern of modular provision will not satisfy all requirements within the framework.

1.27 The NCVQ should not itself examine or validate, but should accredit certifying bodies. We recommend that:

(22) accreditation should be for up to a maximum period of five years (6.20).

1.28 Employers, trades unions, providers of education and training, individuals in or preparing for employment and parents must be made aware of the significance of what is being done through the NVQ if it is to be speedily and successfully implemented. We recommend that:

(23) the NCVQ should undertake a major promotional campaign to generate awareness of the NVQ (6.21).

A substantial programme of staff training in both the further education and training systems will also be required.

1.29 We hope that work on the NVQ will be undertaken expeditiously and recommend that:

(24) the design criteria for the NVQ should be agreed by early 1987 and first accreditations completed by summer 1987 (6.23).

We would expect to see the framework fully operational for levels I-IV by 1991.

Competence: Standards and Assessment

1.30 If vocational qualifications are to be statements of competence then first, and most importantly, dependable arrangements must be developed for specifying standards of competence across all occupations. Second, vocational qualifications must incorporate those standards. We do not consider that present arrangements are satisfactory for these purposes and recommend that:

(25) the NCVQ should establish a clear focus for national action to secure the specification of standards of competence (7.8);

(26) the NCVQ and the MSC, in consultation with various interests concerned, should make arrangements to ensure specification of standards by effective and appropriate industry bodies for the comprehensive coverage of industry and occupational groupings (7.8), (7.11);

(27) each of the standards-setting bodies should have a formal working relationship with one or more of the examining and validating bodies accredited by the NCVQ (7.11(iii));

(28) attention should be given to ways of making qualifications more informative, especially in indicating the competence of an individual (7.17).

1.31 Furthermore, in order to ensure a workable, effective system there must be comprehensive arrangements for credit recognition and transfer for partial assessments of competence. In particular we are concerned that people should gain credit for performance in skills and competence tests carried out in industry. In order to help people to obtain credit for vocational achievement we recommend that:

(29) the NCVQ should actively promote arrangements for credit recognition, accumulation and transfer (7.22);

(30) the NCVQ, in consultation with other interested parties, should prepare proposals for and secure the implementation of a substantial extension of skills testing facilities (7.23).

YTS Certification

1.32 In our Interim Report, in addition to recommendations for a comprehensive

system of vocational qualifications we made recommendations relating to YTS certification. Our proposals have since been broadly accepted and acted upon. A YTS Certification Board has now been established to ensure coherent development of qualifications. The Board will endorse qualifications suitable for use in YTS.

1.33 We regard these steps as an interim measure, pending the full integration of YTS certification within the national system of vocational qualifications. We recommend that:

(31) MSC review at an early date, with the National Council and Scottish interests, the future role, constitution and reporting arrangements of the YTS Certification Board (8.6);

(32) from the outset assessments within YTS should be embraced within the National Vocational Qualification as this is introduced and developed (8.8).

Progression to Higher Education and Higher Level Professional Qualifications

1.34 We noted earlier that a national framework should embrace higher level professional qualifications, but that priority should be on designing levels I–IV. We recognise that the full development of the framework beyond level IV will take time and we have considered what steps might be taken in that direction in the meantime, in particular to tackle problems of progression.

1.35 Change is required in order to ensure that:

- appropriate recognition is given to vocational qualifications for entry to, and progression within, higher education and higher level professional qualifications;
- barriers to entry and progression are the minimum consistent with the maintenance of standards;
- routes of progression and standards of achievement in professional qualifications are clearly stated;
- the learning needs of adults are recognised and more adequately met.

1.36 To bring about a more effective system we recommend that:

(33) the NCVQ should, from the outset, seek the full co-operation and commitment of appropriate bodies for full recognition of the NVQ in entry procedures and regulations for degree courses (9.10(i));

(34) the NCVQ should, similarly, seek the full co-operation and commitment of professional bodies for full recognition of the NVQ in entry procedures (9.10(ii));

(35) the NCVQ should take all appropriate steps to secure the agreement of professional bodies to fit all appropriate professional qualifications and part qualifications into levels I to IV of the NVQ framework by 1991 (9.10(iii));

(36) a National Register of professional bodies whose policies and practices meet NCVQ criteria should be established (9.10(iv));

(37) the NCVQ should set up discussions between professional bodies with overlapping or contiguous interests with a view to seeking harmonisation of qualifications and the removal of unnecessary variations in related syllabuses (9.11).

Scotland and Northern Ireland

1.37 The Group's remit did not extend to Scotland or Northern Ireland but, as we believe our recommendations point towards a UK system of vocational qualifications, we feel bound to comment on implications for those countries. We are aware of the separate development of vocational education arrangements in Scotland and accept that, at least initially, Scottish interests would prefer to build on existing developments rather than participate fully in the work of the NCVQ. We believe that in due course there should be full Scottish participation.

1.38 Close links exist between the bodies involved in existing arrangements for vocational qualifications in England and Wales and in Northern Ireland, and there is general support in Northern Ireland for the thrust of our recommendations. In view of this we recommend that:

(38) the NCVQ be responsible from the outset for the development of a coherent system of vocational qualifications in England, Wales and Northern Ireland (10.10).

A National Database of Vocational Qualifications

1.39 If we are to move swiftly to a readily understandable system, early work will be required on the collection, analysis and dissemination of information on vocational

qualifications. We recommend that:

(39) the NCVQ should establish a national database of vocational qualifications to assist it to design, monitor and adapt as necessary a national framework of vocational qualifications and to make that framework readily comprehensible to its users (11.1);

(40) the database should contain information both on all qualifications accredited by NCVQ and, as far as information sources allow, on vocational qualifications at all levels awarded within the United Kingdom, including qualifications by professional bodies (11.3);

(41) the NCVQ should, in setting up the database, take account and make use of existing systems wherever possible (11.4);

(42) access to the database should be made available as widely as possible, initially through appropriately located facilitators (11.6);

(43) the database should be in place within a year of the establishment of NCVQ (11.7).

Conclusion

1.40 In conclusion, we believe that implementation of our recommendations will create a clearer, more coherent and comprehensive system of vocational qualifications of benefit to all. The system could then provide a focus for the outcomes of vocational education and training. We have provided a basis for future action which has the support of major interested parties, and hope that swift action will now follow to implement our recommendations.

Reproduced with the permission of the Controller of Her Majesty's Stationery Office

APPENDIX 2

SOME APPROACHES TO ASSESSMENT

Business and Technician Education Council (BTEC)

1. The Business and Technican Education Council provides a validation and moderation service. The curriculum is designed by colleges (very much influenced by guidelines issued by BTEC) and the curriculum (or programme) is validated by BTEC, who would argue that programmes of study are curriculum-led rather than examination-led.

Moderation

2. The implementation of programmes of study are monitored by moderators, appointed on the basis of their subject and assessment expertise, and personal qualities related to their ability to act as BTEC consultants to colleges. Thus, although the scrutiny of college assessments is a focus of their activity, moderators are expected to take a broad view of college provision including resourcing, staffing, liaison with local industry, and generally to encourage internal moderation of these processes. This is attempted through one or two visits a year with BTEC providing support for these moderators through training sessions, and involve workshops and case studies on matters relating to college responsibilities with respect to the operation of the programme. In addition, the moderators are supported by full-time regional co-ordinators who convene meetings between moderators concerned with a single subject area of college, and deal with difficulties that a college moderator may encounter.

In addition to moderator visits, BTEC is developing a range of statistical moderating instruments that should contribute to greater consistency in the awards of grades. These instruments are at present being implemented on a trial basis.

Assessment

3. On BTEC programmes, college staff are generally responsible for standards on the basis of the BTEC validated curriculum (specified usually in aims and objectives) and the general running of the courses (staffing, resources, student progression decisions, entry requirements, assessments, etc.), although each of these stages may be sampled in some detail by the moderator. In producing and implementing assessment plans, staff are required to submit an assessment scheme in accordance with guidance such as that contained in TEC Guidance Note 8 (attachment 1) that advises on possible assessment models. This was a TEC document and this guidance is now being modified to relate more closely to BTEC policy that requires that assessment strategies reflect the aims and objectives of programmes of study through the selection of the appropriate instrument for the types of competences being assessed.

4. A policy of criterion-based continuous assessment is promoted to strengthen the link between the assessment and taught curriculum, the aim being to increase the validity of the assessment in relation to the aims and objectives of the course by increasing the range of competences sampled. However, links with workplace competences must be tenuous for the reasons outlined above. Also many teachers implementing schemes find the use of continuous assessment a burden (this is not unique to BTEC). However, BTEC does encourage the use of a range of assessment techniques appropriate to the objectives; for example, interpersonal skills can be assessed through group work.

Standards

5. Standards, therefore, essentially reside with the college concerned and they are expected by BTEC to relate their programme to the needs of local industry; quality is largely determined by design criteria and moderation.

PROFESSIONAL BODIES

6. There are many professional bodies that lay down education and training content in relation to a grade of membership and often associated with identified courses and periods of practice. This content is likely to be associated with the National Council for Vocational Qualifications (NCVQ) levels beyond level IV and will involve extensive consultations. The validating and examining bodies, such as BTEC, are making progress in formalising arrangements with the professional (and statutory) bodies for recognition of their awards. Indeed, with the NCVQ there will be some urgency that all examining/validating and professional bodies set up negotiations with a view to increasing access to courses and appropriate professional grades.

City and Guilds of London Institute (CGLI)

Skills testing

7. CGLI is directly involved with assessment in several ways. The Testing Services Unit works directly with industry. A group such as the Bus and Coach Council or F.W. Woolworth may approach the Unit with a request to provide tests and these will underpin certification of the training provided by the company. Following such a request the staff of the CGLI Unit will discuss the pattern of testing appropriate to the training programme, train company staff to design and analyse the tests and generally monitor the assessment techniques designed and applied by the company. The tests reflect the aims and objectives of the programme so that standards relate to the decisions made by the company trainers, in discussion with the Testing Services Unit.

CGLI Mainstream

8. The traditional function of the CGLI is the issuing of syllabus schemes with examinations based on these syllabuses. These are the responsibility of various CGLI working parties set up by invitation to interested groups

such as industrialists, trade unions, professional bodies and recognised specialists.

9. Although in the early days of issuing schemes, a very descriptive style was adopted, schemes are now presented in terms of aims and objectives, and assessment controlled by CGLI is clearly related to these aims and objectives by an appropriate assessment specification. This implies that CGLI appropriate assessments/examinations relate to scheme content. Assessment produced by CGLI for these courses is for final certification purposes and where these comprise objective tests they are statistically analysed after being taken by the candidate. Where assessment in relation to formative assessment is required, it is generally seen by CGLI as the responsibility of the teacher. A profile method of recording may be used and/or it may be accorded a weighting in the total assessment. Where it is, some form of CGLI assessor is appointed to act as a moderator.

Teacher/instructor training

10. Further CGLI initiatives include achievement testing courses for instructors and teachers in the techniques and methods of assessment. This provision recognises the need for introducing expertise in this area to teachers.

The Royal Society of Arts (RSA)

11. The RSA provides examinations in information handling and in a range of other subjects. Traditionally their examinations relate to office skills but foreign language and information technology skills are now included. The emphasis is also changing from the examination to the assessment of competences with a corresponding swing from norm-referencing to criterion-referencing, where the criteria are based on views of the workplace. The competences are established by investigating what employers require in terms of skills. For example, typewriting competences are well established in terms of speed and accuracy, but by involving appropriate employers, the validity of the examinations with respect to the workplace

is hopefully increased. For example, a research audit carried out in typewriting skills showed that speed was not by itself a sufficient criterion for assessment. Production rate was found to be the key idea for employers and this was a function of both speed and 'mailability'. RSA intends to extend the idea of research audits.

Examinations

12. Where single subjects are concerned, examinations are provided at three levels: Stages I, II and III. The RSA general criteria for these stages are provided in attachment 2 together with more specific criteria for 'Communication in Business'. There are two grades associated with the examinations: pass and fail.

Profiles

13. RSA has recognised, like CGLI and BTEC, that the examinations have limitations in that many important process skills, such as those concerned with working in groups, cannot be measured by traditional examinations. The RSA, like CGLI and to a lesser extent BTEC, has therefore developed profiles for some of its schemes/courses, with the aim of providing a framework for assessing the skills demonstrated by an individual. For example, a profile framework will include profile sentences related to content and suggested teaching/learning activities (see attachment 3 that relates sentences to the CPVE core objectives). The descriptor sentences aim at being occupationally specific, so that where a learner achieves the bulk of a sentence, it is assumed that he/she will be able to perform in the corresponding area of the job. In certain areas (e.g. Computer Literacy and Information Technology) two forms of certificate are available: profiles certificates and a full Stage I examination certificate, the latter applying to the students who have achieved specified minimum criteria. A further example of the use of profiling is found in the Modular Information Technology Scheme for Teachers and Trainers (attachment 4 indicates the approach

to profiling and certification for Computer Literacy and Information Technology and gives examples of profiling sentences for the Modular IT Scheme for Teachers and Trainers).

Assessors

14. The examination system is overviewed by RSA appointed assessors who are usually teachers. Their duties include advising on assessments, judging the resources (staff and equipment) available in a college and disseminating good practice between colleges. They also assist in providing support in profiling as do members of RSA headquarters staff. This support takes the form of the workshops using documents such as the 'RSA Profiling Package'.

General

15. Although entry qualifications to the courses associated with examining/validating bodies are often suggested by the bodies themselves, encouragement is given to the process by which college staff judge how likely the intending student/trainee is to succeed on the education/training programme. Where the arrangements for progression take the form of rules and regulations, access to many training and education programmes will be more difficult for many intending students/trainees. However, a flexible approach should encourage recognition of individual achievement by one validating/examining body certified by another body. Further, assessment and recognition of experiential learning, i.e. learning through experience rather than through study or formal instruction, should be given for entry, exemption and credit purposes. But development work is required before methods of assessing competences gained in this way can be recognised and certificated.

Industrial Training Boards (ITBs)

16. Many ITBs employ skill tests that include assessment of practical performance carried out in surroundings as

similar as possible to the workplace. The tests often take the form of standard tests that may be viewed as a compromise between, on the one hand, attempting to increase validity by simulating real work situations and, on the other, ensuring that reliability is maintained through the standardisation of the test. By increasing the reliability in this way, assessments become less dependent on the examiner and are repeatable.

Examples of ITB developments

17. The Plastics Processing Board has called for the establishment of a selected range of key tests that will be 'measurable' and lead to a certification of standards. The Engineering ITB has pioneered standards-based assessment and modular accreditation by the use of phase tests used in training centres. Continuous assessment is accepted and there is little difference between the test pieces, training exercises or work pieces. Some of this is, of course, carried out in college training workshops. The Construction ITB proposes to set up a national network of test centres and panels of assessors who will ensure that the tests are carried out in a fair and accurate way, the claim being made that the test situation broadly resembles the work situation. The Road Transport ITB has set up test centres that the Board prefers to use, rather than deputising the testing to employers.

18. These examples show that ITBs are aware of the need to simulate the workplace in practical tests but the varied methods used or proposed suggest no simple or unique solution. They also appear to be concerned with the need to attain reliability (through standardisation); validity remains a problem. Ease of use is also of concern to ITBs, in relation to the costs of testing.

Youth Training Scheme

19. The MSC has issued advice about the requirements and recommendations applying to the two-year Youth Training

Scheme programmes (Guide to Scheme Content and Quality). In addition illustrative schemes are issued and these give preferred models (see attachment 5) that include descriptions of the various areas of the models such as: occupational training areas, aim and purpose, progression opportunities, competence objectives with a list of basic and optional areas of competences; these are expanded in the document. For example, for Hygiene, the trainee should be able 'to observe and carry out health and hygiene regulations relating to self, equipment, goods and environment'.

Workplace assessments

20. MSC documentation includes some advice about assessment. It should be based upon situations requiring a demonstration of competence, a combination of skills and related knowledge in purposeful, recognisable tasks. Continuous assessment of competence may take place in planned work experience, in occupational training and in off-the-job training and education. In addition, initial assessment should be made of the trainees' strengths and weaknesses in the core areas (number, communication, problem solving, practical, computer and information technology skills). The preference is for workplace (and cheap) assessments. Virtually nothing is said about assessing transfer - a major aim of YTS.

21. The effectiveness of such assessments will very much depend on the skills of managing agents and supervisors who will require i) a knowledge of what constitutes assessment practice, ii) access to a support system, and iii) a willingness to implement efficient assessment practice in the workplace. These requirements, based on ITB and exam board experience, suggest the need for a system that includes the construction, analysis and banking of standard tests, together with their validation and moderation. Therefore, although work-based assessments promise the possibility of increasing the validity of assessments with respect to occupational relevance, the evidence so far on

practice in the field, and implementation of such tests, shows that there is much to be done. The MSC has more research under way in this area, but at the moment the credibility of the philosophy of on-job testing is far from proven.

ATTACHMENT 1

BTEC MODEL ASSESSMENT PLANS - SUMMARY

MODEL	SEE NOTES	PHASE TESTS: NUMBER	MIN % OF TOTAL	END-OF-UNIT TESTS: MAX % OF TOTAL	SUGGESTED LENGTH	ASSIGNMENTS: MAX % OF TOTAL	APPLIES TO UNITS
A	a) c)	3	100%	none		none	
B	a) b) c)	3	60%	40%	1 - 2 hours	none	At levels I/II
C	a) c) d) e)	3	60%	none		40%	
D	a) b) c) d) e)	3	30%	40%	1 - 2 hours	30%	
E	a) b) c)	3	60%	40%	2 - 3 hours	none	At level III & higher
F	a) b) c) e)	3	30%	40%	2 - 3 hours	30%	
G	a) c)	2	100%	none		none	half units e.g. Maths
H	c) d) e)	none		none		100%	with predominantly practical skills
J	c) e) f)	none		50%	2 - 3 hours	50%	At level II & higher

NOTES

a) Phase tests are not cumulative and will cover only the material dealt with in the preceding fraction of the unit. The suggested duration of each phase test is approximately one hour.

b) There will not be unnecessary overlap between phase tests and the end-of-unit test. The final phase test could be combined with the end-of-unit test if appropriate in a two part examination.

c) The relative weightings of the assessment components will be derived from the assessment analysis and from the balance of skills and topics within the assessment components.

d) Practical assignments will be used to assess student competence in the areas identified as 'motor skills'. As such practical work will invariably assess some cognitive in addition to motor skills, these assignments will in general have a weighting which is greater than the percentage allocated to motor skills in the assessment analysis.

e) Assignments to assess the higher intellectual skills may include library research exercises, design projects, homework etc.

f) The end-of-unit test should be carefully structured into three approximately equally weighted sections each covering approximately one third of the objectives in a unit, and related to the assessment analysis for the unit. Each section must be passed in its own right. There should be no element of choice in the test.

The use of any of the above model assessment plans is not intended to restrict the teaching method adopted (e.g. practical work, tutorials, homework, case studies etc.)

RSA Stages

Stage I	indicates that a basic course in the subject has been completed and the successful candidate has sufficient knowledge or skill to begin employment, although further study would be beneficial.
Stage II	indicates a sound understanding and competence in the subject and a recommendation for employment. It also suggests that someone who holds such a certificate may well benefit from advanced studies.
Stage III	indicates an all-round knowledge and understanding of the subject and in the practical skills a very high degree of proficiency.

Communication in Business

Stages I, II and III

Stage I aims to enable the student to communicate effectively at work, to develop an awareness of the ways in which effective communication contributes to the attainment of organizational objectives, to appreciate the importance of communication skills in creating and sustaining productive personal relationships, both within and outside an organization.

Stage II aims to enable the student to apply principles and processes of communication and to undertake the communication function of one of a number of posts such as secretary, clerical officer or administrative assistant within an organization.

Stage III is concerned with the underlying principles of business communication, and with relating these to the practical situation.

When held

Stages I and II — New Year, Easter and Summer
Stage III —Summer only.

41

BUSINESS AND ADMINISTRATIVE: INTRODUCTORY STUDIES

CONTENT	SUGGESTED TEACHING/ LEARNING ACTIVITIES	AVAILABLE PROFILE SENTENCES	ATTAINABLE CWVE CORE OBJECTIVES To be amended to New Core
5.7 Understand the various forms of transport on road, rail, sea and air, and the purpose for which they are suitable 6 Understand the ways in which central and local government, and trade unions influence business and administrative services 7 Understand the various types of organisation and their internal structures especially communication methods 8 Be aware of current and emerging technologies and their effect on commerce and industry 9 Make a realistic assessment of the employment prospects in the business and administrative service vocational category	Group analysis of national networks Local surveys/analysis of services Questionnaire to local companies Visits - local authorities etc Interviews Formal knowledge inputs Local surveys Visits to organisations Formal knowledge inputs Visits to organisations Familiarisation with equipment Group/self assessments Role play Work experience Simulations Diary/logbook profile reviews	Carry out tasks/procedures, check results and make adjustments as necessary Record observations, procedures and results Explain conclusions at an appropriate stage Evaluate task/procedure (e.g. by improvements or modifications). Write in relevant form using appropriate content, expression and accuracy Use appropriate written form to express idea and opinion Produce letters both formal and informal Interpret and complete accurately and legibly a variety of forms Transfer information accurately Check written material for errors and discrepancies and correct accordingly Convey a piece of spoken information in writing Make notes from written or spoken material Adapt a given piece of information into an appropriate format for a stated purpose Evaluate his/her own performance Recognise whether or not a task has been satisfactorily completed Recognise ease or difficulty with which a task has been performed Recognise consequences of a chosen line of action	CD 1.4 develop his/her ability to work creatively with others on a collaborative project ISE 4.4 use appropriate sources of legal advice and information (ref Communication 1.3) ISE 3.2 appreciate the basic economics of businesses e.g. deciding what to sell, choosing a location, borrowing money, employing people, buying raw materials, calculating overheads, profit and loss, selling, investment PRS 1.1 demonstrate an awareness of his/her practical and perceptual abilities through experience of vocational activities, and understand the implication of these for future job choice ISE 3.1 develop basic competencies in handling personal finances ISE 1.2 investigate at first hand the duties, demands and responsibilities of new entrants to a firm or organisation ISE.3.4 distinguish between different types of business organisation PCD 2.6 describe the basic management structure within a particular firm or organisation; identify channels of communication to and from young workers and areas of responsibility of their immediate supervisors (ref Industrial, Social and Environmental Studies 1.1)

Computer Literacy and Information Technology

Stage I/Profile Certificate This scheme aims to assess the candidate's ability to use computers and information technology effectively in common applications.

Method of Assessment The assessment comprises a Keyboard Skills test and locally assessed assignments selected from database spreadsheets, word processing, videotex, graphics or business/accounting packages.

Certification Two forms of certificates are offered: profile certificates and full Stage I certificates for those who achieve specified minimum criteria.

When held Assessment may be carried out at any time during the course of study or training.

Booklets Computer Literacy and Information Technology
Computer Literacy and Information Technology — Tutors' Handbook.

Examples of Profiling Sentences from Modular IT Scheme for Teachers and Trainers (1986/7)

Profile Sentences	**Criteria for Achievement**
The candidate is able to:	The candidate must demonstrate ability to:
1 **DEMONSTRATE an understanding of what is covered by the term IT.**	1.1 **PROVIDE a range of definitions of IT which cover the various dimensions and uses of IT in education.**
	1.2 **PRODUCE aims for learning/training programmes which incorporate the use of IT teaching/learning strategies.**
	1.3 **DEMONSTRATE a clear understanding of the difference between the study of IT as a separate subject and the use of IT as an educational resource.**
	1.4 **DEFINE the broad objectives of an IT course which are required for personal/vocational elements of general education.**
2 **USE generic IT systems appropriately to solve problems.**	2.1 **PRODUCE evidence to demonstrate and explain the application of four generic IT packages to particular problem-solving needs ((a) and three others).**
	(a) **Word processing (creating, editing, structuring/restructuring, output to other packages eg spellchecks)**
	(b) **Spreadsheets (creating, editing, structuring, manipulating)**
	(c) **Integrated package or the integrated use of software (creating, editing, manipulating, retrieval)**
	(d) **Graphics display (creating, editing, manipulating)**

FROM: Illustrative Scheme for the Distributive Industry
MSC, 1986

Basic competence objectives

On completion of the training programme, the trainee should be able to:

Health and safety

- Maintain high safety standards for premises, equipment and stock, taking due regard for the safety of customers and fellow workers.

Hygiene

- Observe and carry out health and hygiene regulations relating to self, equipment, goods and environment.

Distribution organisation

- Indicate an understanding of the importance of the distributive industry nationally and locally and identify the diversities of the industry.

Stock

- Deal correctly with procedures affecting stock receipt, issue, control and care.

Cash handling

- Organise and handle personal cash, taking into account the short-term and long-term effects of saving and borrowing.

Cash payment methods

- Follow set procedures for receiving payments by cash, cheques, credit cards, giving change and receipts, recording payments and balancing totals.

Information technology

- Operate and use applications of computer and information technology relevant to the distributive industry (see Core Skills Part II) and demonstrate an appreciation of the implications of new technology to the distributive industry.

Customer service

- Act appropriately in situations involving customers and retain the goodwill of customers.

Customer selling

- Serve and sell to customers in order to create business and promote custom/success.

Security

- Carry out the functions necessary for the effective operation of security procedures.

Sales administration

- Deal competently with the paperwork a sales assistant is likely to encounter everyday.

Product categories – Commodity groups

- Demonstrate a knowledge of commodity groups.

Product categories – Knowledge by sector

- Demonstrate a sector knowledge of products identifying customer benefits and using information from a variety of sources.

Product categories – Display by sector

- Display sector products effectively according to company policy.

Legislation – Consumer/retail

- Observe and promote the relevant rights and obligations of manufacturers, distributors and customers.

Stock room

- Deal correctly with procedures affecting stock checking, handling and storage for:
  - retailing and/or
  - wholesaling.

Specific job skills

- Carry out the functions necessary for effective performance in a specialised skill area, eg. butchery, fresh produce.

Transportation/location

- Operate systems and procedures necessary for the transportation of goods to identified locations on time for:
  - retailing and/or
  - wholesaling.

Consumer/competitor knowledge

- Conduct a survey of consumers/competitors for a specific company.

Business viability

- Demonstrate a working knowledge of the accountancy, book-keeping systems and procedures which enable a business performance to be analysed.

Distribution trends

- Show an understanding of the trends in distribution.

Retailing and the economy

- Show an understanding of the effect of retailing on the local and national economy, and its relationship with the local community.

Mutuality and self-help organisations

- Show an understanding of the various voluntary, mutual and self-help organisations within the distribution sector.

Information gathering

- Collect and collate oral and written information/instructions effectively.

Communications – including working with others

- Establish and maintain effective communications and working relationships with others.

Legislation – employment

- Demonstrate a working knowledge and understanding of employment legislation.

Reproduced with the permission of the Controller
of Her Majesty's Stationery Office

FROM: Review of Vocational Qualifications in England and Wales HMSO, 1986

Glossary of Education and Training Terms

Accreditation

The issue of formal recognition that bodies or institutions or the procedures used by them meet specified requirements.

Achievement/Attainment Test

A test that measures achievement in a particular subject or occupation rather than potential.

Assessment

Appraisal or estimation of an individual's degree of ability by whatever means (e.g. interviews, course work, assignments, practical tasks, written tests, etc). Assessment may be internal (carried out by a teacher/tutor/supervisor) or external (carried out by an outside agency – usually only relevant to written tests).

Awards

A general term for qualifications issued by examining or validating bodies.

Certifying Body

An organisation which issues a document formally attesting that the document holder has passed in specified assessments and/or fulfilled specified requirements.

Competence

The ability to perform a particular activity to a prescribed standard.

Credit Accumulation

Arrangements which enable candidates to accumulate a specified number of credits, usually by successful completion of individual modules, to qualify for an award.

Credit Transfer

The acceptance of an award, or credit gained towards an award, as credit towards another award.

Criteria for Assessment

Predetermined lists of qualities against which a student's work can be compared and the degree of success determined; or, lists of requirements to be covered in assessment procedures.

CPVE

The Certificate of Pre-Vocational Education (CPVE) is designed for young people who wish to stay on at school or college after their period of compulsory education, for whom a specific academic or vocational course is not appropriate. One year courses leading to the new qualification were introduced in autumn 1985.

Curriculum

The entire programme of learning experiences which together make up a course. Also, the entire range of learning experiences provided by an institution.

Examination

One or more tests or assessment of knowledge or proficiency, involving the use of either written or oral questions and/or exercises.

Examining and Validating Bodies

An organisation which makes awards to candidates who pass examinations which the organisation has set and marked itself to its own syllabuses is classified as an examining body. An organisation which makes awards to candidates who successfully complete an internally or externally assessed course which the organisation has approved and monitored is classified as a validating body. These terms, as used in this report, exclude industry and professional bodies.

Further Education (FE)

All post secondary education other than that provided in universities. FE and Higher Education (HE) overlap in the area of Advanced Further Education (AFE) as provided in polytechnics and other public sector institutions.

Experiential Learning

Learning through experience rather than through study or formal instruction.

GCSE

The General Certificate of Secondary Education is to replace GCE 'O' levels, CSE and joint 16 plus examinations. The first GCSE courses will begin in September 1986, the first examinations

taking place in 1988. All GCSE courses and examinations will follow nationally agreed guidelines, known as 'national criteria'. Grade criteria will be introduced as soon as possible, spelling out what pupils will need to know, understand and be able to do in order to achieve a particular grade in a subject.

Higher Education (HE)

Education beyond GCE A level or equivalent, provided in universities and public sector institutions.

Level

Classification of the degree of difficulty or complexity of a course or award with reference to other courses or awards.

Moderation

Procedures to align standards of assessment between different tests papers, testing occasions, examiners, centres, etc. For example, internal assessment may be moderated by an external examiner who ascertains that the assessment standards of a group of internal examiners are consistent from candidate to candidate and comparable with those of such examiners in similar institutions elsewhere.

Module (of Learning)

Separate and self-standing parts of educational or training programmes designed as a series to lead to a certain level of qualification or attainment or as a related group from which programmes may be chosen, according to need. The term always requires definition because modules can be as short as the forty hour units in the Scottish Action Plan (or even shorter) or as long as the small number of modules which comprise some BTEC and CNAA courses.

Module (of Accreditation)

A self-standing unit for awarding credit within a system of qualifications. The module is defined in terms of an area of competence and the standards by which the competence is assessed.

Non-Advanced Further Education

Educational provision post 16 outside schools up to and including BTEC National Certificate/ Diploma, GCE 'A' level qualifications and their equivalent.

Occupation

A group of related skills, tasks or activities which are common to a range of jobs and which are grouped together under a title for the purpose of identification and classification.

Occupational Group

A group of jobs centred on the same basic discipline, such as production engineering, and within which the recruitment qualifications overlap. Employees will tend to move up or across the job group by extending or developing their knowledge and skills.

Pre-Vocational Education

Education designed to give people a broad preparation and requisite knowledge for entry to the world of work generally, normally developed through study and experience of one or more broad groups of occupations. It may be offered pre-16 or post-16 through CPVE.

Professional Body

An association incorporated for the purposes of seeking standards for those who practise in a profession or occupation, of advancing knowledge related to the profession and of protecting and promoting the interests of its members. A professional body which examines sets and marks examinations to its own syllabus or approves and monitors educational institutions to carry out examinations on its behalf.

Progression

Building on existing competences either to broaden their range, to bring them up to date, or to extend them to a higher level.

Skill

Facility gained by practice or knowledge.

Standards

The agreed and recognised levels of competence – skills, knowledge, understanding and experience – to be achieved through education or training, or required to perform a job or range of jobs.

Syllabus

A concise, written description of the subject matter of a course or examination.

Task

An element or combination of elements of work by means of which a specific result is achieved.

Training

The provision of learning experiences enabling trainees to develop specified competences.

TVEI

The Technical and Vocational Education Initiative is a five year pilot scheme to stimulate the provision of technical and vocational

education for 14–18 year olds in the education system.

Validation

The process of scrutinising a proposed course and of deciding whether or not it should be approved as being of an appropriate nature and standard for the award to which it is intended to lead and, if this proves to be the case, of then specifying the conditions which must be fulfilled if the course is actually to run. Validation may be 'internal' or 'external' depending on whether it is carried out by the institution which provides the course or by an outside body.

Validity

The extent to which assessment fulfils its purpose.

Vocational Education

Education designed to prepare people for work in a particular occupation or groups of occupations. It may be given at the level of further or higher education.

Work Experience

Placement of a student or trainee with a company or organisation to give experience of the working environment.

YTS

A Government sponsored training scheme for young people which offers two-year programmes to 16 year old school leavers and one year programmes to 17 year old school leavers; and gives opportunities for vocational training leading to recognised vocational qualifications.

Reproduced with the permission of the Controller
of Her Majesty's Stationery Office

Board of Management

Chairman

J G Owen CBE, *Chief Education Officer, Devon*

Members

J W Ballard, *Association of Principals of Colleges*
Association of Colleges for Further and Higher Education
J A Barnes, *Business and Technician Education Council*
City and Guilds of London Institute
Royal Society of Arts
J A W Deboo OBE, *Confederation of British Industry*
R J Hartles CBE, *Association of Metropolitan Authorities*
T P Melia HMI, *Department of Education and Science*
J Monks, *Trades Union Congress*
J O Morris, *Association of County Councils*
I Randall, *Manpower Services Commission*
L J Rees, *Welsh Joint Education Committee*
C R Walker, *Department of Education and Science*
A F Warren, *National Association of Teachers in Further and Higher Education.*

Observers

Dr F D Duffin, *Department of Education, Northern Ireland*
J Howgego, *Scottish Education Department*
K McWilliams, *School Curriculum Development Committee*
P C Webb HMI, *Welsh Office Education Department*

Secretary

Jack Mansell, *Chief Officer, Further Education Unit.*

Objectives

The objectives for which **The Further Education Unit (FEU)** *is established are to promote, encourage and develop the efficient provision of further education in the United Kingdom and for that purpose:*
a) to review and evaluate the range of existing further education curricula and programmes and to identify overlap, duplication, deficiencies and inconsistencies therein;
b) to determine priorities for action to improve the provision of further education and to make recommendations as to how such improvement can be effected;
c) to carry out studies in further education and to support investigations of and experimentation in, and the development of further education curricula and to contribute to and assist in the evaluation of initiatives in further education;
d) to disseminate and publish information and to assist in the dissemination and publication of information about recommendations for and experiments and developments in further education.

A limited number of extra copies of this report are available from

Publications Despatch Centre,
Department of Education and Science,
Honeypot Lane, Canons Park,
Stanmore, Middlesex HA7 1AZ.